

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-312296  
(43)Date of publication of application : 07.11.2000

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(51)Int.CI. H04N 1/41  
G09C 5/00  
H04L 9/00  
H04N 1/387  
H04N 7/30

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(21)Application number : 11-119839 (71)Applicant : SEIKO EPSON CORP  
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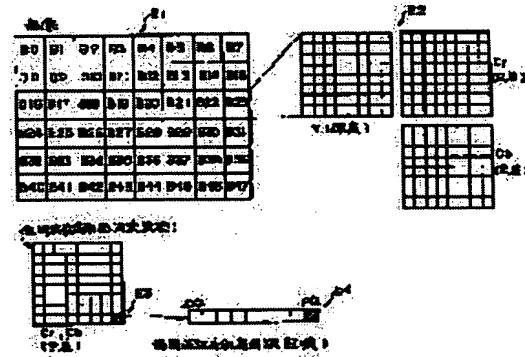
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(54) IMAGE ENCODING SYSTEM, IMAGE DECODING SYSTEM, INFORMATION  
STORAGE MEDIUM AND ELECTRONIC EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To insert additional data to image data while reducing the degradation of image quality by inserting the additional data to a high frequency component of an orthogonal transformation coefficient when the orthogonal transformation coefficient obtained by orthogonal transformation is quantized.

SOLUTION: An additional data is inserted for the least significant bit of the high frequency component of a DCT coefficient by a display part E4. Thus, change of image quality is not affected, for example, by writing of zero (the additional data) when the least significant bit of original image data is zero and writing of 1 (the additional data) when the least significant bit is 1. Namely, only when writing of 1 when the least significant bit of the original image data is zero and the writing of zero when the least significant bit is 1, deviation is generated in a value of the least significant bit. The least significant bit is the one of the high frequency component of color difference data which is inconspicuous to human eyes. Therefore, possibility that the least significant bit is sensed is hardly exit even when the additional data is inserted into it.



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LEGAL STATUS

[Date of request for examination] 29.05.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration] withdrawal

[Date of final disposal for application] 22.08.2005

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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